



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/712,790

11/14/2000

Charles A. Eldering

T721-10

8882

27832 7590 08/27/2008  
TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME  
2003 SOUTH EASTON RD  
SUITE 208  
DOYLESTOWN, PA 18901

EXAMINER

SHELEHEDA, JAMES R

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

08/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/712,790	<b>Applicant(s)</b> ELDERING ET AL.	
	<b>Examiner</b> JAMES SHELEHEDA	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-18, 60, 62-65 and 68-105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-18, 60, 62-65 and 68-105 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 06/30/08, with respect to Zigmond and Doherty have been fully considered but they are not persuasive.

Applicant argues that Zigmond does not allow an advertiser to purchase a specific slot or location, as the advertisement in Zigmond is relative to the content of a previous advertisement.

In response, Zigmond states that an advertiser may ensure that their ad will directly follow after an advertisement of a competitor (column 14, lines 17-21). This clearly meets the limitation of a "specific slot" as the advertiser has specified a specific location for their advertisement to be shown. Although the selection is made relative to another advertisement, the selection still qualifies as a "specific" spot as it is an explicit declaration on the desired display. The "specific" spot desired is the one **directly** after their competitor. This allows them to highlight the competitive advantage of their goods or services (column 14, lines 17-21). Thus, applicant's arguments are not persuasive, as Zigmond clearly provides for a "specific slot" as required by the claims.

Applicant argues that in Zigmond's system will make an appropriate ad select based on the available ads and criteria and that this does not constitute the ability of an advertiser to purchase a "specific slot".

In response, Zigmond wherein the advertiser may direct the system to insert their advertisement after a competitors ad (column 14, lines 14-23). Thus, while the system makes the determination of what ad to insert at any particular time, the system is limited to the particular ads and ad criteria that are available. In this case, it has a specific ad that is limited to a particular slot (a slot occurring after a competitor's slot). The advertiser has ensured that their ad will only be displayed at the time they feel will have the greatest impact, after a direct competitor (see Zigmond at column 14, lines 15-20).

For example, if the advertiser is "Ford" and the competitor is "Toyota", then Ford has ensured that their ad will occur after a Toyota ad. This meets the current claim limitations.

Zigmond discloses wherein the advertiser pays to have their ad shown (column 8, lines 22-29) and wherein the advertiser is specifying where their ad should be displayed (column 14, lines 15-20). The advertiser has purchased the particular slot, as the advertiser paid to get their ad shown and it was shown in that slot.

In response to applicant's arguments on page 17, regarding claim 60, it is noted that Doherty specifically discloses wherein advertisements are repeated at a defined interval specific by the advertiser (paragraph 50, Fig. 3D). A periodic "ramp" priority interval is generated to guarantee the ad is periodically scheduled and displayed. Therefore, applicant's arguments are not convincing.

On pages 17-18, applicant argues that Doherty fails to disclose selling specific slots in a queue.

In response, Doherty discloses wherein advertisers will pay to have their ads inserted into the queue and displayed to a viewer (paragraph 40, 46, 48 and 49). The basic teaches of Doherty are that the ads are listed and then played out from the queue, thus the advertiser has purchased a slot within the queue, as there is no other way for their ad to be shown. By paying to be inserted into the queue, the advertiser has purchased a space within the queue.

Regarding “specific” slots within the queue:

- a. Zigmond was relied upon to teach “specific” locations, as Zigmond discloses wherein an advertisement may request to be directly after a competitor, which is a “specific” location.
- b. Doherty discloses wherein the advertisements may have a “ramp” priority (paragraph 50, Fig. 3D) and further that the ramp may be periodic (paragraph 50). This ensures that the advertisement is repeatedly scheduled over a determined period.
- c. Every advertiser has purchased some “specific” slot, as every ad within the schedule has a unique separate location within the queue. Thus, at the time of generating the queue, each ad is assigned to a unique “specific” slot. Each of these slots have been purchased, as the advertisers have to pay to get their ad shown.

Therefore, applicant’s arguments are not convincing.

In response to applicant's arguments on page 18 against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, as indicated in the rejections, it is the combination of Zigmond with Doherty which discloses the current claim limitations. Zigmond discloses wherein advertisers pay to have their advertisement displayed and wherein the advertiser may select to have their advertisement immediately follow a competitor's advertisement (column 14, lines 17-21). Doherty specifically discloses wherein a queue is created listed a plurality of the upcoming advertisements (schedule with defined slots; paragraph 25; Fig. 2) advertisers may pay to alter the order of the advertisements within the queue (paragraphs 40, 46, 48 and 49).

Thus, as Zigmond has been modified to include a queue of a plurality of selected advertisements, as opposed to selecting a single advertisement, it is the combination of Zigmond with Doherty which disclose the current claim limitations, as an advertiser may purchase a specific queue slot (i.e. the slot immediately after a competitor's slot) so as to allow advertisers to display their advertisements at a time that is likely to provide the greatest impact to the viewer.

Doherty discloses generating the queue (schedule) by individually selecting an advertisement for each slot within the queue (Fig. 2; paragraph 25 and 40-47) based

upon the priority at the particular time (Fig. 2; paragraph 25 and 40-47). Thus, when the queue is being filled, the system will look at the particular slot and decide what ad should be displayed based upon the conditions for that slot.

For example, a “Toyota” advertisement may be inserted into the first slot. When determining the best ad for the second slot, the system may then select a “Ford” ad for the second slot, if Ford desires to have their ad shown directly after their competitor (as taught by Zigmond).

Therefore, applicant’s arguments are not persuasive.

In response to applicant’s arguments in regards to the motivation to combine Zigmond and Doherty, Zigmond discloses a system wherein an advertisement is selected in advance of the time the advertisement is to be displayed (Fig. 6, steps 110-116; column 17, lines 21-32). Doherty discloses a system wherein multiple advertisements are selected and ordered for display in advance of the time the advertisements are to be displayed (paragraph 24). This listing of advertisements allows the system to utilize greater compression techniques providing the advertisement data in more compact size (paragraph 28) and while ensuring the advertisements are compiled and ready for display in time (paragraph 28 and 55). Thus, one of ordinary skill in the art would have been clearly motivated to combine Zigmond and Doherty’s system, as both systems provide for targeted advertisements wherein advertisers may pay to control the presentation of their advertisement, and would enable more efficient storage/retrieval of the advertisements.

Further, it is noted that lack of storage is a problem acknowledged by Zigmond (column 15, lines 17-23), as it would require additional filtering and processing steps to decrease the ads stored within the receiver. The use of Doherty's queue system allows the use of greater compression techniques, which would overcome this shortcoming and reduce the bandwidth required to transmit the ads. Therefore, applicant's arguments are not convincing.

Applicant argues that Zigmond's system already selects ads "on demand" and thus would be rendered inoperable by requiring a schedule instead of an "on demand" process.

In response, it is noted that Zigmond's system does not operate in an "on demand" manner, as applicant suggests.

As seen in Fig. 6, steps 110 and 112, and column 17, lines 21-31, the system will select advertisements ***in advance*** of their display time. The ads are *not* selected "on demand" as one advertisement will be selected prior to the insertion time and scheduled to be inserted at the next ad space.

The only difference in scheduling between Zigmond and Doherty is in *the number* of ads which are selected in advance. Zigmond discloses selecting one ad in advance, while Doherty discloses selecting plural ads in advance. By selecting more ads in advance, Doherty allows for additional benefits, such as more powerful compression techniques to be used, as addressed above.

Therefore, applicant's arguments are not convincing.



On pages 22-23, applicant argues that Zigmond took into account "a system wherein multiple advertisements are to be displayed", but specifically did not follow this concept in his invention and points to Fig. 2A as a "list of multiple advertisements pre-selected for insertion and display."

In response, it is noted that Fig. 2A is merely representative a broadcast stream being transmitted by a national broadcaster (column 2, line 64-column 3, line 6). It is only indicated as showing a local broadcaster inserting a local ad into an "occasional time slot" (column 3, lines 2-6). There is no indication as to how the ads were selected for insertion, and certainly no indication that a "list" was somehow used in this selection. As the figure merely shows a "series of advertisements inserted at a predetermined time", they could have been selected by any method, including simply selecting one ad at a time. Applicant's assertion that Zigmond was aware of selecting ads utilizing a "list" of several upcoming ads and actively chose to spurn that method is completely unfounded.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 8, 10, 12-18, 60, 62-65, 68-105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (Zigmond) (of record) in view of Doherty (US 2003/0200128 A1) (of record).

As to claim 1, Zigmond discloses a method of selectively inserting advertisements into a programming stream (column 4, lines 7-15) at different receiving nodes of a communications network (households receiving broadcast television signals; column 7, lines 13-36), said method comprising:

(a) transmitting the programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(b) storing advertisements (column 17, lines 21-28 and column 11, lines 31-49) at a node of said network (storing ads in ad repository, 86; Fig. 5, column 15, lines 24-34), each advertisement being previously matched to one or more subscribers associated with one of said receiving nodes (wherein only ads selected by the ad selection criteria for a subscriber are sent to memory and stored; Fig 5; column 15, lines 16-23 and column 11, lines 31-49);

(d) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

(e) determining at each of said receiving nodes (through a received trigger), one or more intervals in said programming stream within which advertisements may be inserted (column 15, lines 35-44);

(g) inserting said advertisement into said programming stream at said receiving node within said determined one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32), he fails to specifically disclose storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs) and a plurality of queue slots, each of said ARL's comprising data disclosing a location of a corresponding advertisement, retrieving from said queue one of said ARLs in accordance with said order and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and

playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs) and a plurality of queue slots, each of said ARL's comprising data disclosing a location of a corresponding advertisement, retrieving from said queue one of said ARLs in accordance with said order and wherein the said specific queue slots at least partially determine the order of the ARLs in said ordered list, as taught by Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 2, Zigmond and Doherty disclose wherein said programming stream includes indicators that identify the start of an avail (encoded trigger signal; see Zigmond at column 15, lines 45-52) in said programming stream for insertion of an advertisement (see Zigmond at column 15, lines 35-37), wherein step (e) includes

detecting said indicators (see Zigmond at column 15, lines 57-61) and wherein step (g) includes inserting said advertisement into said avail (see Zigmond at column 15, lines 57-61).

As to claim 7, Zigmond and Doherty disclose wherein said queues are stored locally at said receiving nodes to which they correspond (wherein the queue is locally generated and stored; see Doherty at Fig. 1-2, paragraph 29).

As to claim 8, Zigmond and Doherty disclose wherein step (a) includes receiving a plurality of channels of television programming (see Zigmond at column 7, lines 1-12 and 14-28) and selecting one of said channels (the currently tuned program channel; see Zigmond at column 13, lines 14-39 and column 15, lines 45-49), wherein step (e) includes detecting said avails in said selected channel (triggers in the current channel; see Zigmond at column 15, lines 45-52) and wherein step (g) includes inserting said advertisements into said avails in said selected channel (inserting ads into the current monitored stream; see Zigmond at column 15, lines 57-65).

As to claim 10, Zigmond and Doherty disclose wherein step (b) includes storing said advertisements at said receiving node (ad repository, 86 in ad insertion device 80; see Zigmond at Fig. 5, column 15, lines 24-34).

As to claim 12, Zigmond and Doherty disclose wherein step (d) includes selling the specific queue slots to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

As to claim 13, Zigmond and Doherty disclose wherein step (d) includes selling the specific queue slots (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within said queue of said sold slots (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 14, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 15, Zigmond and Doherty disclose (h) recording a portion of said stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 16, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream as the stream is being recorded (wherein the

Art Unit: 2623

system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 17, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 18, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 73, Zigmond and Doherty disclose wherein the retrieved ARL is not dependent on a selection of a corresponding advertisement (see Zigmond at column 16, line 65-column 17, line 9).

As to claim 74, Zigmond and Doherty disclose wherein the ARLs are not linked to the determined interval until the ARL is retrieved from the queue (wherein the next ads are selected independent of the upcoming interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 75, Zigmond and Doherty disclose wherein the order of the ARLs in the ordered list is independent of the substance of the advertisements corresponding to the ARLs in the queue (wherein the ads are selected based upon the advertisers desire to target particular demographics; see Zigmond at column 14, lines 35-58).

As to claim 79, Zigmond discloses a method of inserting advertisements into a programming stream (column 4, lines 7-15) in a communications network (column 7, lines 13-36), said method comprising:

(a) transmitting the programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(b) storing said programming stream at one or more receiving nodes (column 14, lines 1-12);

(d) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29);

(e) retrieving the stored programming stream from the one or more receiving nodes to create a retrieved programming stream (displaying the recorded programming; column 14, lines 1-12);

(f) detecting one or more intervals in said retrieved programming stream (through a received trigger) within which advertisements may be inserted (column 15, lines 35-44); and



(g) inserting said advertisement into said retrieved programming stream at said receiving node within said determined one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots and inserting said unscheduled advertisements in accordance with said ordered list and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and

Art Unit: 2623

playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots and inserting said unscheduled advertisements in accordance with said ordered list and wherein the said specific queue slots at least partially determine the order of the ARLs in said ordered list, as taught by Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 80, Zigmond and Doherty disclose wherein the order of the advertisements in the queues is independent of the substance programming stream (wherein the advertisements to be displayed are dependent upon the user's viewing habits or demographics, and not upon the program; see Zigmond at column 13, lines 7-13, column 14 lines 13-58 and column 17, lines 21-26).

As to claim 81, Zigmond and Doherty disclose wherein each of the one or more queues is associated with a channel in the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53).

As to claim 82, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (see Zigmond at column 11, lines 15-18), and wherein step (g) includes inserting the advertisements (see Zigmond at column 15, lines 57-65) from a queue associated with the selected channel (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53) into the detected intervals in the selected channel (see Zigmond at column 15, lines 57-65).

As to claim 83, Zigmond and Doherty disclose wherein the queues are stored at the subscriber node (wherein the queue is locally generated and stored; see Doherty at Fig. 1-2, paragraph 29).

As to claim 84, Zigmond and Doherty disclose wherein the specific queue slots are sold to advertisers (wherein third party advertisers contract to have their ads

Art Unit: 2623

inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

As to claim 85, Zigmond and Doherty disclose wherein the specific queue slots are sold (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within the queue of the sold specific queue slots (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 86, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 87, Zigmond and Doherty disclose (h) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 88, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 89, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 90, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 91, Zigmond and Doherty disclose wherein the inserted advertisement is not dependent on a selection of that advertisement (see Zigmond at column 16, line 65-column 17, line 9).

As to claim 92, Zigmond and Doherty disclose wherein the advertisements are not linked to the detected one or more intervals until the advertisement is inserted into the detected intervals (wherein the next ads are selected independent of the upcoming interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 93, Zigmond and Doherty disclose wherein the order of the advertisements in the ordered list is independent of the substance of the advertisements in the queue (wherein the ads are selected based upon the advertisers desire to target particular demographics; see Zigmond at column 14, lines 35-58).

As to claims 94 and 96, Zigmond and Doherty disclose wherein the order of the advertisements is independent of the timing of the detected intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

As to claim 97, Zigmond discloses a method of inserting advertisements into a programming stream in a communications network (column 4, lines 7-15), the method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling specific locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

(d) detecting one or more intervals in said programming stream within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting advertisements into said programming stream within said detected one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32), each advertisement being previously matched to one or more subscribers associated with one of said receiving nodes (wherein only ads selected by the ad selection criteria for a subscriber are sent to memory and stored; Fig 5; column 15, lines 16-23 and column 11, lines 31-49), he fails to specifically disclose storing a queue, said queue comprising a plurality of queue locations and wherein the sold specific queue slots at least partially determine the order of the advertisements in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order

Art Unit: 2623

of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising a plurality of queue locations and wherein the sold specific queue slots at least partially determine the order of the advertisements in said ordered list, as taught by Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 98, Zigmond and Doherty disclose wherein the advertisements in the queues are independent of the timing of the detected intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).



As to claim 99, Zigmond and Doherty disclose wherein each of the one or more queues is associated with a specific channel in the programming stream (associated with the currently viewed channel; column 12, line 44-column 13, line 6).

As to claim 100, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (column 12, line 44-column 13, line 28), and wherein step (e) includes inserting the advertisements from a queue associated with the selected channel into the detected intervals in the selected channel (associated with the currently viewed channel; column 12, line 44-column 13, line 6).

As to claim 101, Zigmond and Doherty disclose wherein the specific individual queue slots are sold to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

As to claim 102, Zigmond and Doherty disclose wherein the specific individual queue slots are sold (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) at least partially on a repetition rate within the queue of the sold individual queue locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 103, Zigmond and Doherty disclose wherein the order of the in the ordered list is independent of the substance of the advertisements in the queue (wherein ads are inserted based upon time of day; column 13, lines 59-67).

As to claim 60, Zigmond discloses a method of inserting advertisements into programming stream (column 4, lines 7-15) in a communications network (Fig. 3; column 7, lines 13-36), said method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29);

(d) detecting one or more intervals in said programming stream (through a received trigger) within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting advertisements into said programming stream within said detected intervals (column 15, lines 57-65), wherein the order of the advertisements is independent of the timing of the determined one or more intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110) and inserting advertisements in accordance

with said information (Fig. 6, step 110; column 17, lines 23-32), he fails to specifically disclose storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots, and inserting said unscheduled advertisements in accordance with said ordered list, identifying a repetition rate specified by an advertiser, wherein the repetition rate represents spacing between queue slots relative to previous queue slots in the queue, selling queue slots based at least partially on the specified repetition rate and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and playback time; paragraphs 40, 46, 48 and 49) wherein the advertiser will specify a repetition rate for their advertisements (Fig. 3D, paragraph 50) representing the spacing between the playing of the advertisements (Fig. 3D; paragraph 50) for the typical benefit

Art Unit: 2623

of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots, and inserting said unscheduled advertisements in accordance with said ordered list, identifying a repetition rate specified by an advertiser, wherein the repetition rate represents spacing between queue slots relative to previous queue slots in the queue, selling queue slots based at least partially on the specified repetition rate and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list, as taught by combination with Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 62, Zigmond and Doherty disclose wherein the order of the advertisements in the queues are independent of the substance programming stream

(wherein the advertisements to be displayed are dependent upon the user's viewing habits or demographics, and need not be dependent upon programming content; see Zigmond at column 13, lines 7-13, column 14 lines 13-58 and column 17, lines 21-26).

As to claim 63, Zigmond and Doherty disclose wherein each of the one or more queues is associated with a channel in the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53).

As to claim 64, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (see Zigmond at column 11, lines 15-18), and wherein step (e) includes inserting the advertisements (see Zigmond at column 15, lines 57-65) from a queue associated with the selected channel (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53) into the detected intervals in the selected channel (see Zigmond at column 15, lines 57-65).

As to claim 65, Zigmond and Doherty disclose wherein the queues are stored at the subscriber node (wherein the queue is locally generated and stored; see Doherty at Fig. 1-2, paragraph 29).

As to claim 68, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 69, Zigmond and Doherty disclose (f) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 70, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 71, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 72, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when

a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 76, Zigmond and Doherty disclose wherein the inserted advertisement is not dependent on a selection of that advertisement (see Zigmond at column 16, line 65-column 17, line 9).

As to claim 77, Zigmond and Doherty disclose wherein the advertisements are not linked to the detected one or more intervals until the advertisement is inserted into the detected intervals (wherein the next ads are selected independent of the upcoming interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 78, Zigmond and Doherty disclose wherein the order of the advertisements in the ordered list is independent of the substance of the advertisements in the queue (wherein the ads are selected based upon the advertisers desire to target particular demographics; see Zigmond at column 14, lines 35-58).

As to claim 95, Zigmond and Doherty disclose wherein the order of the advertisements is independent of the timing of the detected intervals (wherein ads are inserted based upon time independent information, such as program content, ratings

and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

As to claim 104, Zigmond and Doherty disclose wherein a purchaser of the sold specific queue slot places his advertisement in a particular one of the queue slots (see Zigmond at column 14, lines 17-21).

As to claim 105, Zigmond and Doherty disclose wherein the each of the sold specific queue slots has a position within the queue known to the purchaser of the slot at the time of purchase (see Zigmond at column 14, lines 17-21).

4. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Doherty as applied to claims 2, 20, 39 and 51 above, and further in view of Bhagavath et al. (Bhagavath) (6,119,098) (of record).

As to claim 3, while Zigmond and Doherty disclose indicators for upcoming avails and ARLs corresponding to advertisements, they fail to specifically disclose identifying a duration of said avail and identifying a duration of said advertisement.

In an analogous art, Bhagavath discloses a system for insertion advertisements into media (column 1, lines 65-67 and column 2, lines 1-10) which will provide media metadata (Fig. 10) indicating intervals when ads are to be inserted and the duration of the ad interval (column 6, lines 44-48) and ad metadata (Fig. 9A) defining a duration of an ad (column 6, lines 25-31) and wherein a particular ad is chosen by comparing the



two types of data (column 6, lines 18-24) for the typical benefit of ensuring that a selected ad will fit into a particular ad slot.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Doherty's system to include identifying a duration of said avail and identifying a duration of said advertisement, as taught by Bhagavath, for the typical benefit of selecting an advertisement of appropriate duration for any particular ad slot.

As to claim 4, Zigmond, Doherty and Bhagavath disclose wherein said order of said ARLs in said queue is based at least partially on said duration of said advertisements relative to said duration of avails detected in said stream (based upon a comparison of an ad duration and an ad slot duration; see Bhagavath at column 6, lines 18-21, 29-31 and 44-48).

As to claim 5, Zigmond, Doherty and Bhagavath disclose

(h) determining at least one characteristic of a viewer of said television programming (determining user preferences; see Zigmond at column 11, lines 13-19 and lines 24-30); and

(i) ordering said queue based at least partially on said at least one characteristic (wherein the ad selections are based upon the viewer data; see Zigmond at column 11, lines 13-19 and lines 42-49).

As to claim 6, Zigmond, Doherty and Bhagavath disclose wherein said at least one characteristic is based on the content of the programming stream prior to said interval (wherein the determined user characteristic at any particular interval is inherently based on viewing habits prior to the interval; see Zigmond at column 11, lines 13-18).

As to claim 9, Zigmond, Doherty and Bhagavath disclose  
(h) receiving at said receiving node instructions (selection rules and parameters; see Zigmond at column 11, lines 66-67 and column 12, lines 1-14 and lines 25-32) dictating how to order said ARLs in said queue (dictating the selection of advertisements; see Zigmond at column 11, lines 35-49); and  
wherein step (c) includes ordering said queue in accordance with said instructions (wherein the advertisements are selected from the queue for use based upon the context info for the ads; see Doherty at Fig. 2, paragraph 40-52).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2623

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

### **Certificate of Transmission**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. ( ) \_\_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

---

Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SHELEHEDA whose telephone number is (571)272-7357. The examiner can normally be reached on Monday - Friday, 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda

Examiner, Art Unit 2623

JS

/Chris Kelley/  
Supervisory Patent Examiner, Art Unit 2623